OFFICE OF COMPUTER SERVICES

FUNCTIONAL DIRECTORY

(CONDENSED)

OFFICE OF COMPUTER SERVICES
FUNCTIONAL DIRECTORY

Office of Computer Services (OCS)

25X1A

	25X1A	Room	Extension
Director		2E-29	25X1A
Deputy Director		"	
Executive Officer		"	
Computer Science Advisor		"	

Advanced Projects Staff (APS)

25X1A

| Chief, Advanced Projects Staff | | GA0519 |

APS develops new computer techniques that are of potential utility to many users. The staff works on services of general interest, as opposed to the applications divisions, which address specific needs to their customers. The following represents some of the services that the staff provides:

    1. Develop Computer Time-Sharing Systems - Such systems allow many people to simultaneously make use of one computer for each individual's particular application.

    2. Develop Man/Machine Languages - The special languages used on the remote terminals are devised by the Staff. These languages must be simple to learn and easy to use so that they can be used directly by the many kinds of people who need computer support.

    3. Computer System Evaluation - Review prospective computer systems, particularly new and unusual types, after which systems are evaluated and appropriate recommendations made.

** Acting Director

ADP Training Staff (ATS)

Chief, ADP
    Training Staff   25X1A   ID1601   25X1A

    The Training Staff is responsible for designing and teaching a computer science training program as a service of common concern. The training staff offers courses in computer systems fundamentals and programming (Basic and Modified ADEPT), ADP Orientation, Systems Analysis, PL/1 (Programming Language 1), Operating System 360, PL/1 Macro Writing, Linear Programming, Interactive Services Course, APL/360, ALC Macro Writing, and COBOL Programming Techniques.

Operations Division (OPS)

25X1A

Chief, Operations Division   GC-03

Deputy Chief

Chief, Computer
    Processing Branch   GC-03

Chief, Production Control
    Branch   GC-03

25X1A

    The computer center is open 24 hours a day, 7 days a week, processing 300 to 350 computer jobs each day. The job of operating and scheduling the many computers and peripheral equipment and the maintenance of a tape library of over 11,000 reels of magnetic tapes and 140 large disk packs is handled by the Computer Processing Branch.

    Job control and card punching is handled by the Production Control Branch. The [   ] serves to provide input data for computer processing using keypunch machines, card sorters, collators, interpreters, and printers. The [   ] provides technical advice and schedules and coordinates production requests. In addition, this Branch is responsible for reviewing and maintaining the written step-by-step procedures on an average of 75 projects that are submitted for production processing each day.

25X1   25X1

    Each computer hardware system has systems software, which activates and controls the hardware and also functions as an interface between the hardware and the applications programs. As hardware has become more sophisticated with special sensory, interrupt, and decision features, the systems software which must utilize these features has become correspondingly more complex. The implementing and modifying of this systems software is done by systems programmers who comprise the Technical Staff. In addition, this specially skilled staff develops utility programs of general usage, and acts as consultants on hardware and software problems.

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Management Support Division (MSD)

Chief, Management Support Division	25X1A	GD3910	25X1A
Deputy Chief		GA2512	
Chief, Manpower and Personnel Branch		GA2512	
Chief, Budget and Fiscal Branch		GD5307	
Chief, Material Branch		GD5306	
Chief, Development Branch		GA3910	

Broadly speaking, MSD helps the Support Directorate by using computer systems to account for people, money, and things and provides reports which aid the DDS office directors by providing related services or resources. All of this is accomplished by the four Branches under the direction of the Chief/MSD.

About fifty different projects are involved, serving most of the offices in the Support Directorate and several, components elsewhere in the Agency. They are also engaged in a very large scale developmental project (Support Information Processing System--SIPS) which involves the study, redesign, evaluation, and programming for most of the present Support Directorate activities and which will extend information processing into areas not previously serviced. A SIPS Task Force consisting of the entire Management Support Division and 35-40 DDS officers reports to the Chief, MSD as Task Force Director.

PEOPLE

Some of the files that are processed and maintained in support of the management of the Agency's people are: employees' qualifications or skills file that speeds the search for qualified individuals to fill assignments in urgent or emergency situations as well as in day-to-day reassignments; retirement statistics including projections and actuarial studies; tables of organization including salary controls and position-to-employee comparisions; employee benefits, such as credit union, hospitalization, and insurance accounting and reporting; employee locator information; employee training records including histories of external and internal training, course scheduling, and related statistics; security name check file searching and maintenance; status of the security processing of applicants for employment and status of special clearances.

MONEY

The Division assists in the management of money matters by supporting the Office of Finance and Office of Planning, Programming and Budgeting in a

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number of projects including, general and subsidiary ledger accounting; obligation and expenditure summaries; payroll computation, status and history; employee leave records and statistics; federal and state tax records and reports for employees, employers, and cover organizations, retirement accounting, history, payment, and reporting; budgetary accounting ledgers and summaries; and financial analysis status, history and statistics.
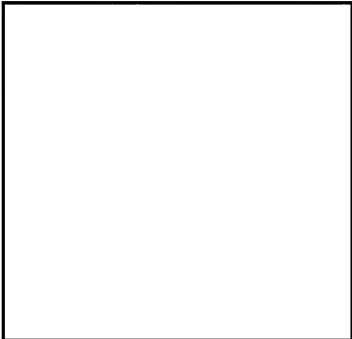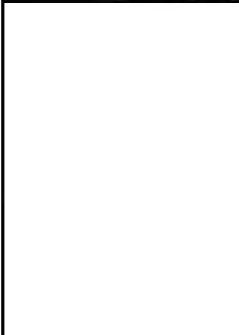
THINGS

In supporting the management of things (property, supplies, etc.) they are involved with stock status and inventory; statistics on trends, projections and history to aid in stock management and similar statistics designed to aid contract management. In addition they assist in providing current catalog information including records of manufacturers stock numbers referenced to federal stock numbers. Computer assistance is also provided in the printing of the Agency Supply Catalogs through computer storage of textual information for line jusitification computations and production of machine language tapes to drive printing equipment. This same procedure is employed in producing several other Agency publications including the DDI-produced encyclopedia, The National Intelligence Survey (NIS).

SIPS

The Support Information Processing System entails revising, redesigning and extending the activities of ongoing projects in support of the management of people, money, and things. The system was started in late 1964 with some help from OCS which has increased to the present DDS-OCS joint effort. The objectives of this system will be to provide common file structures and data; integrate reporting procedures; make use of advanced computer technology and provide up-to-date managerial tools; automate appropriate support activities not now being served by computers; reduce clerical processing and manual procedures throughout the Agency by use of data processing techniques; and standardize data acquisition, data preparation, data flow procedures, and data management in support activities.

Intelligence Support Division

	25X1A		25X1A
Chief, Intelligence Support Division		GD5313	
Chief, Special Staff		GD5313	
Chief, Data Applications Branch		GD5321	
Chief, Special Projects Branch		GD5321	

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Chief, Intelligence
Management Branch

25X1A

GD5313

25X1A

Chief, Programming
Services Branch

GA0513

The Intelligence Support Division develops and maintains EDP systems
in response to requests from intelligence production and evaluation components
(in the DDI, DDS&T, and NIPE). After analyzing problems in data processing
terms, ISD designs files, procedures, and computer programs to operate as
a system; writes and tests the programs; and coordinates the implementation
of the system. The Scientific Applications Division, in part, is in the
same business, but the problems on which they work are those which require
special expertise in mathematics and the physical sciences. Sometimes the
problems are such that both divisions are involved and the efforts are
coordinated.

A good example of ISD activity is the development and continued
expansion of a system to process data on missle and space events for the
Foreign Missle and Space Analysis Center (FMSAC) of the DDS&T. This is
not data which is processed mathematically; it is more-or-less factual
data descriptive of the event. A considerable amount of these kinds of
data is available on each of many events stretching back over recent years.
FMSAC analyzes these data in the continuing effort to assess the significance
of past events, to do prediction of the timing and nature of future events,
and to perform early analysis of events in progress. FMSAC is assisted in
these functions by the development and maintenance of an EDP system.

Another example is a project to manage information on previous,
current, and future Soviet military costs. This Office of Strategic
Research (OSR/DDI) project, known as SCAM (for Strategic Costs Analysis
Model), manipulates data on military force levels and associated costs to
develop total costs of the Soviet military establishment (given various
force structures). One of the obvious advantages of the computer assistance
is the ability to develop fairly easily the cost implications of different
estimated force structures. It has also enhanced OSR's ability to include
in the whole process mathematical techniques for cost-estimating and
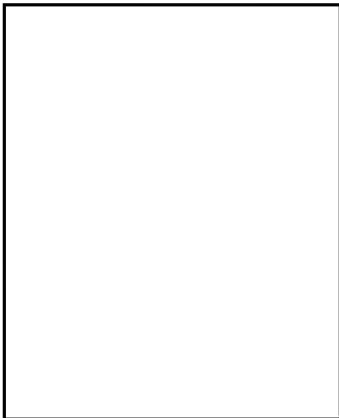time-phasing of large expenditures.

For the Office of Current Intelligence (OCI/DDI) a system has been
developed to process document extracts which have been selected and given
subject or topic tags by current intelligence analysts. This processing
includes retrieval of the extracts using multiple content and bibliographic
criteria. Information on the Viet Nam peace negotiations and on Chinese
foreign relations are among the subject areas in which this system is
being used.

Many data processing projects have similar tasks to perform: they
must be able to maintain files, and in so doing assist in the effort to
keep their content free of error, and they must be able to retrieve data
from the files. Thus, from the standpoint of the tasks performed, many

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systems look alike; only the content of the files differs. ISD is involved in the development of "file management systems" which can perform these tasks essentially independent of the content of the data.

Scientific Applications Division (SAD)

25X1A

25X1A

Chief, Scientific Applications Division		2E-19
Deputy Chief		2E-19
Chief, Trajectory/Orbital Determination Branch		2E-19
Chief, Signal Analysis Branch		2E-19
Chief, Mathematics Branch		2E-19

SAD provides support to other Offices in the DDS&T, three Offices in the DDI, two Offices in the DDS, three Divisions in the DDP, and to NIPE/DCI.

The Division is oriented mostly towards engineering and scientific problems and assists other components by defining and solving problems. It is staffed by personnel of diversified educational backgrounds; e.g., mathematics, physics, electrical engineering, aerospace engineering, engineering science, computer science, and chemical engineering.

The Trajectory/Orbit Determination Branch is concerned with two areas: orbit and trajectory analysis and air defense systems analysis.

The work in air defense systems analysis generally relates to foreign defensive capabilities against penetration by U.S. technical intelligence gathering systems using electronic target surveillance.

25X1D

25X1D

25X1D

25X1D

25X1D

The <u>Mathematics Branch</u> is concerned with five areas; e.g., cartography and plotting, mathematical modeling and simulation, a series of projects in support of three Divisions in the DDP, statistical analysis of medical data, the mathematical analysis of problems occurring in areas other than the above.

The Branch is currently developing programs that will transform data from a map projection of one scale to a map projection of a different scale. This is accomplished by generating a magnetic tape and then using the data from the tape to drive an automatic plotter. In another major effort, three mathematical models are under development which, when incorporated into programs will provide the capability to simulate: a) specific strategic force exchanges under various assumptions concerning force structures; b) the Soviet economy under various constraints of fiscal, political, or military policy; and c) the U.S. ELINT collection systems by type and geographical location and their relative effectiveness. The Branch supports other components in projects involving the analysis of data employing either statistical or mathematical techniques.

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